

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

1. (Currently Amended) A method of identifying a compound that stimulates hepatocyte growth or plasma cell differentiation or Th2 cell subset activity comprising:
 - a) contacting hepatocytes or B cells or T cells from an XBP-1 deficient knockout (XBP-1^{-/-}) mouse embryo, with a test compound; and
 - b) determining the effect of the test compound on the growth of the hepatocytes or differentiation of the B cells into plasma cells or Th2 cytokine production by the T cells, the test compound being identified as a stimulator modulator of hepatocyte growth or plasma cell differentiation or Th2 cell subset activity based on the ability of the test compound to stimulate the growth of the hepatocytes or differentiation of the B cells or Th2 cytokine production by the T cells from the XBP-1 deficient mouse embryo.
2. (Currently Amended) The method of any one of claims 1, 24, and 25, claim 1, wherein the cells deficient in XBP-1 are contacted with the test compound by administering the test compound to the XBP-1 deficient mouse or embryo.
3. (Cancelled)
4. (Currently Amended) The method of any one of claims 1, 24, and 25, claim 1, wherein the cells are isolated from the XBP-1 deficient mouse, or embryo thereof, and the cells are contacted with the test compound by culturing the test compound with the isolated cells deficient in XBP-1.
- 5.-13. (Cancelled)
14. (Original) The method of claim 1, wherein hepatocyte growth is determined by determining the transcription of immediate early genes.

15. (Original) The method of claim 1, wherein hepatocyte growth is determined by monitoring the incorporation of BrdU.

16. (Original) The method of claim 1, wherein hepatocyte growth is determined by TUNEL staining.

17. (Canceled)

18. (Currently Amended) The method of claim 24 claim 1, wherein the differentiation of the B cells into plasma cells B-cell activity is determined by determining immunoglobulin secretion.

19. (Currently Amended) The method of claim 24 claim 1, wherein the differentiation of the B cells into plasma cells B-cell activity is determined by determining Syndecan-1 transcription.

20. (Currently Amended) The method of claim 25 claim 1, wherein Th2 cell subset activity is determined by determining T cell cytokine production.

21. (Currently Amended) The method of claim 20, wherein the T cell cytokine is selected from the group consisting of: IL-4, IL-5 ~~IL-5~~, IL-6, and IL-10.

22.-23. (Canceled)

24. (New) A method of identifying a compound that stimulates plasma cell differentiation comprising:

a) contacting B cells from a chimeric XBP-1 knockout ($XBP-1^{-/-}$) / RAG-2 knockout ($RAG-2^{-/-}$) mouse, with a test compound; and

b) determining the effect of the test compound on the differentiation of the B cells into plasma cells, the test compound being identified as a stimulator of plasma cell differentiation based on the ability of the test compound to stimulate the differentiation of the B cells from the chimeric mouse.

25. (New) A method of identifying a compound that stimulates Th2 cell subset activity comprising:

- a) contacting T cells from a chimeric XBP-1 knockout ($XBP-1^{-/-}$) / RAG-2 knockout ($RAG-2^{-/-}$) mouse, with a test compound; and
- b) determining the effect of the test compound on Th2 cytokine production by the T cells, the test compound being identified as a stimulator of Th2 cell subset activity based on the ability of the test compound to stimulate Th2 cytokine production by the T cells from the chimeric mouse.